"Minimized" LM-PCI *in* *The Elderly Patient*

Ho Thuong Dung, MD, PhD, FACC, FSCAI

Deputy- President of Vietnam Society of Cardiac Intervention

A/Professor of Medicine Pharmacy and Medicine University of HCM city

Department of Geriatrics and Gerontology

Thong Nhat Hospital

Hochiminh city, Vietnam

JCR 2018- Busan- KOREA, *DEC 2018*

Potential conflicts of interest

Speaker's name: Ho Thuong Dung

☑ I have the following potential conflicts of interest to report:

Consultant, Institutional grant/research support:

Abbott
Medtronic
Terumo
Biotronik
Roche
AstraZenrca
Sanofi Synthelabo
Boehringer Ingelheim

Our real practice

- In VN, the concept of ***"The Satellite- Nuleus Hospitals"*** from VN Ministry of Health

⇒ The ***"Satellite- Nucleus" Cathlabs***

WHAT CAN WE DO?

Our real practice

WHAT CAN WE DO?

A. *Continuing to persuade them bypass surgery. If not, sending them back*

B. *Explaining and keeping medical therapy*

C. *Daring do some challenging difficult missions*

CASE Nº 1: NSTEMI

LAM THI T., 75 years-old female

- Was transferred from a local hospital in the middle of VN on 14th March, 2018.
- Risk factors: HTA, dyslipidemia, DM 2.
- Hospitalized with NSTEMI one month ago at provincial hospital
- Was sent to cathlab for revascularization for NSTEMI

CASE Nº 2: NSTEMI

- **ECG:** sinus rhythms, ST-T depression at V4- V6
- **Echocardiography:** EF 45%, some hypokinetic wall motion abnormality.
- **CAG at provincial hospital:** *TVD with severe LM disease and severe calcified diffused lesions with 2 aneurysm/Dilatation on ostial and proximal segment of LAD*

- ***Their interventionist*** tried to do PCI to RCA but only POBA
- They *stopped procedure and send her to our hospital for revascularisation*

CASE Nº 1: NSTEMI

Diagnostic Angiography (at local hjospital)

RCA

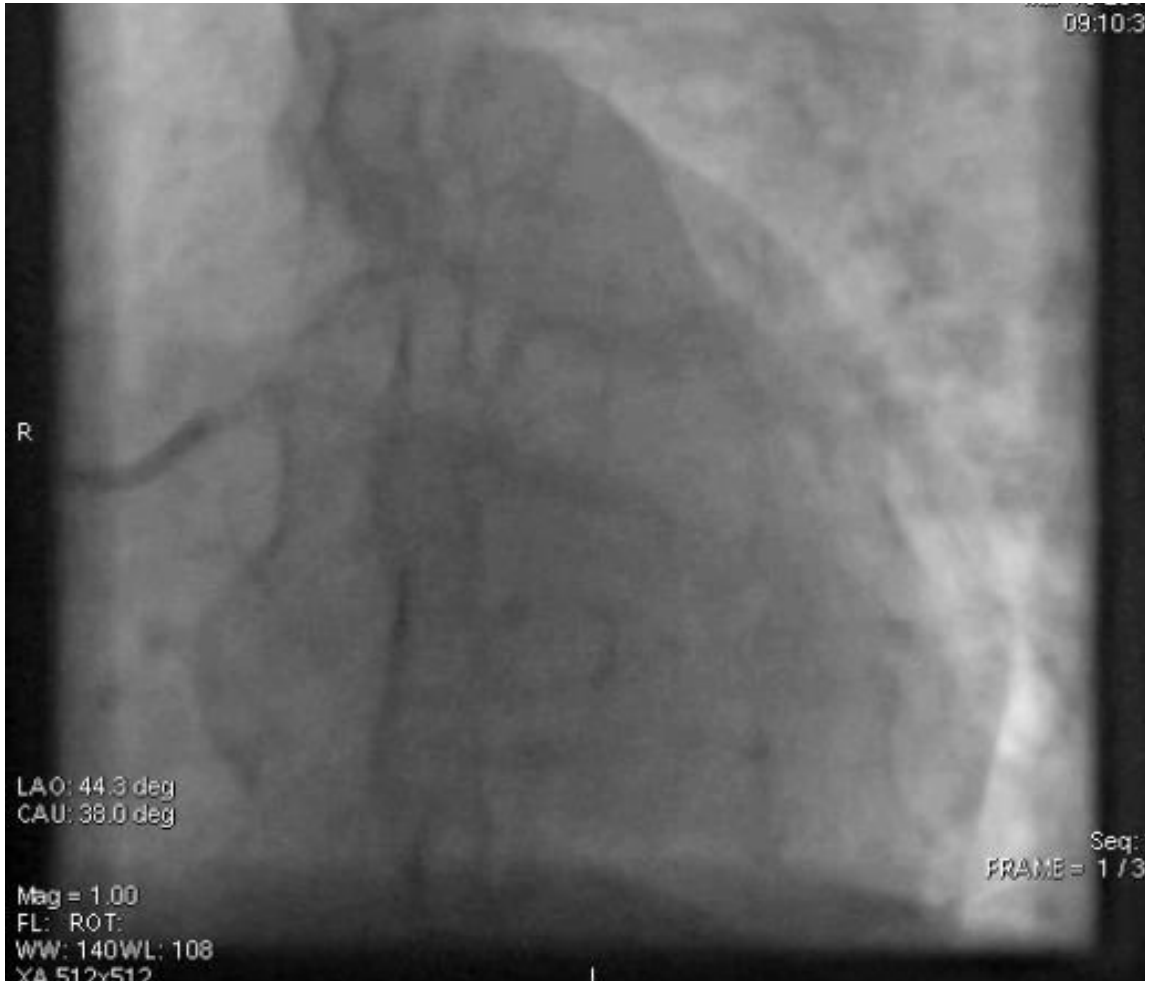
LCA

A/Prof Ho Thuong Dung-- Thong Nhat Hospital- HCMC- VN

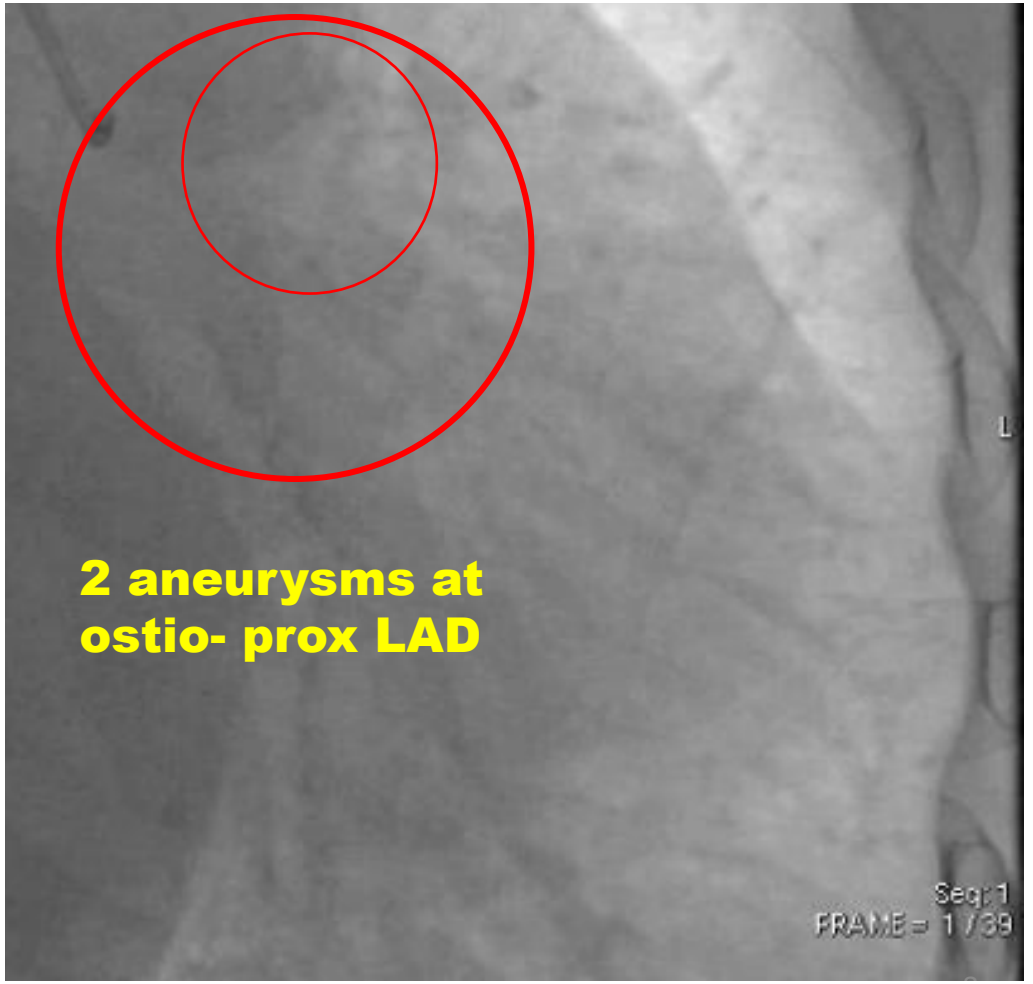
CASE Nº 1: NSTEMI

Diagnostic Angiography (at local hospital)

LCA



LCA



Pay attention to 2 aneurysms at ostium and proximal LAD

CASE Nº 1: NSTEMI

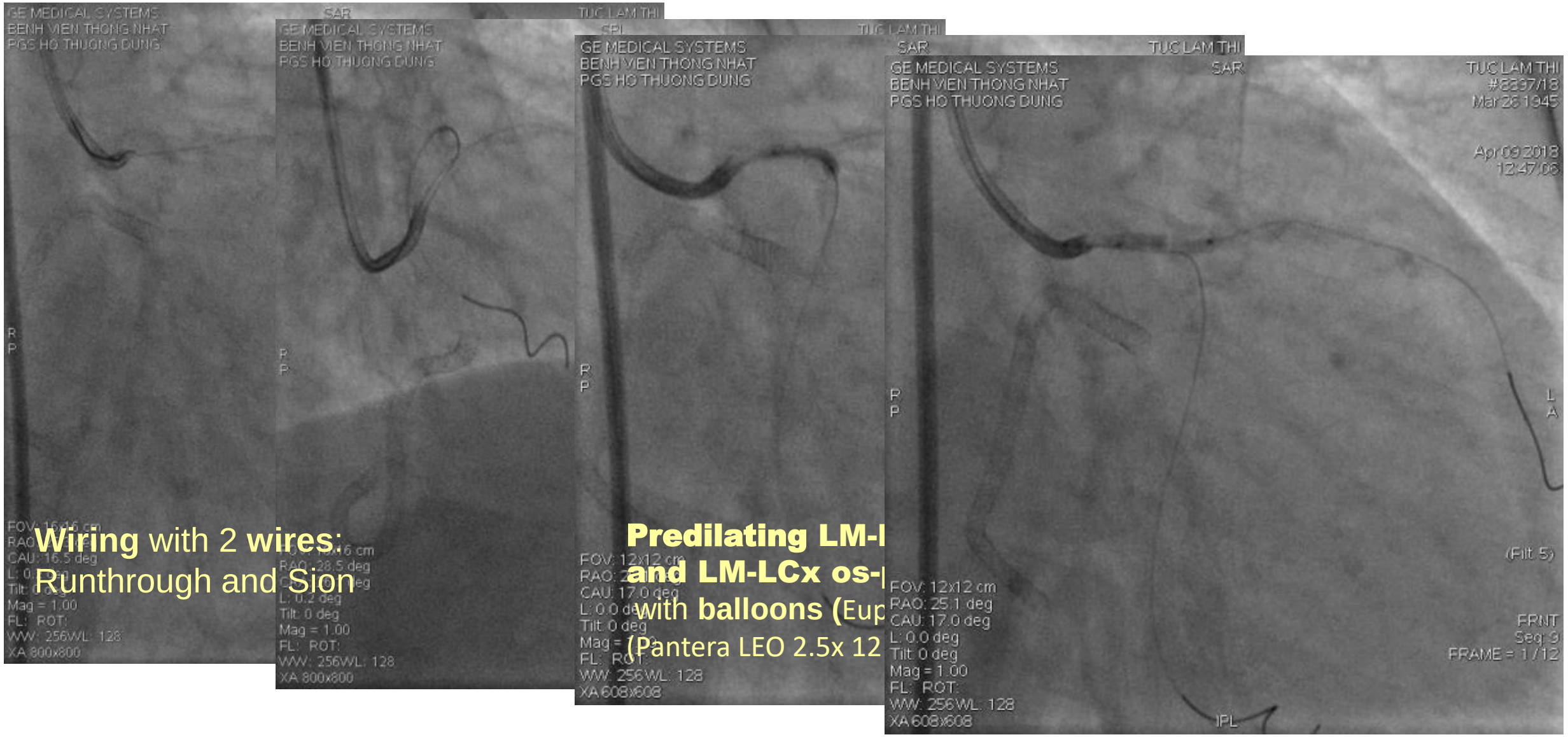
WHAT WE CAN DO FOR THIS PATIENT?

SYNTAX SCORE= 44, *with*

- LM disease at ostium and distal segment
- Diffuse lesions along both of LAD and LCx
- *2 aneurysms* at ostio-proximal LAD

…WE TRY TO DO THAT!…

CASE Nº 1: PCI to LCA *(Complex LM disease)*

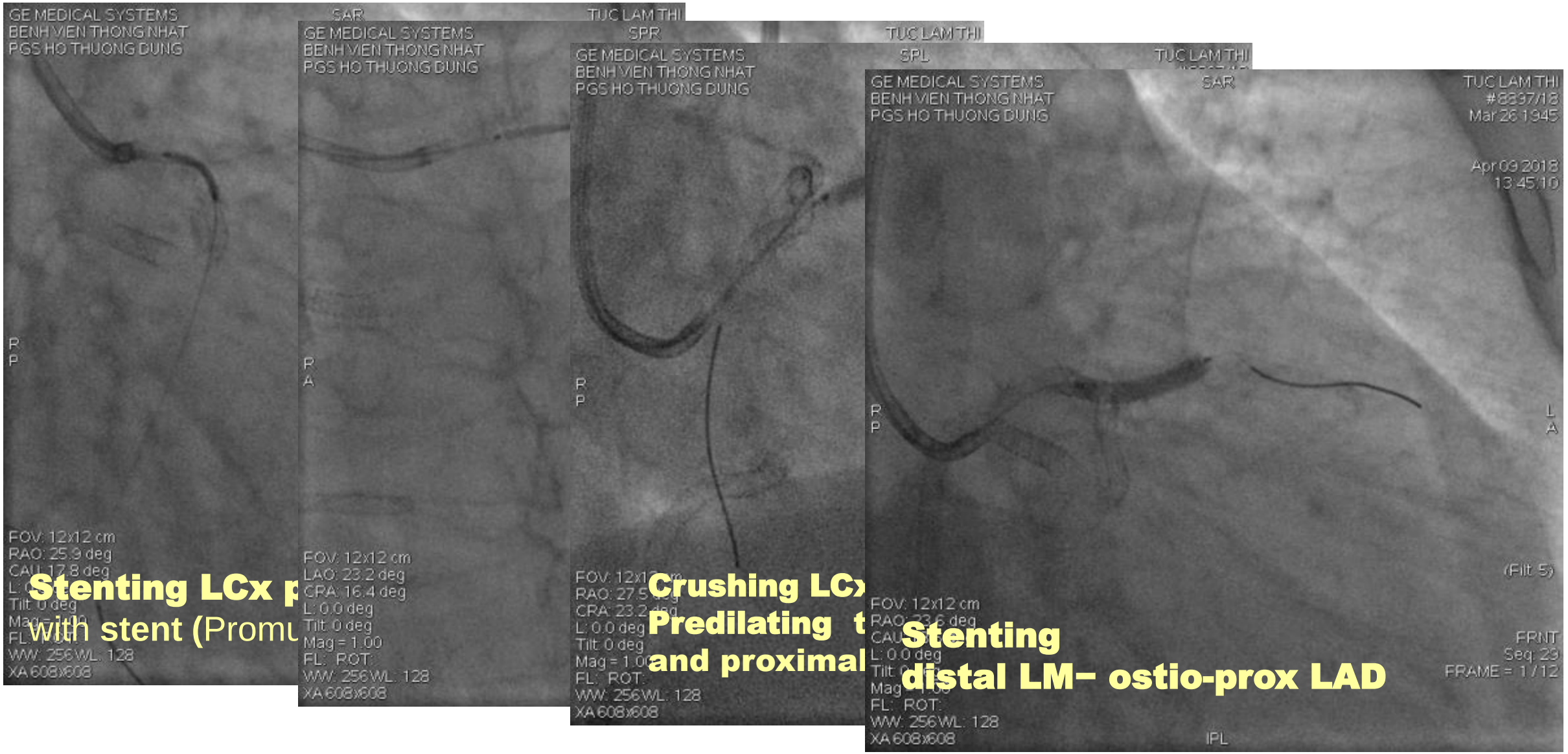


Wiring with 2 **wires**: Runthrough and Sion

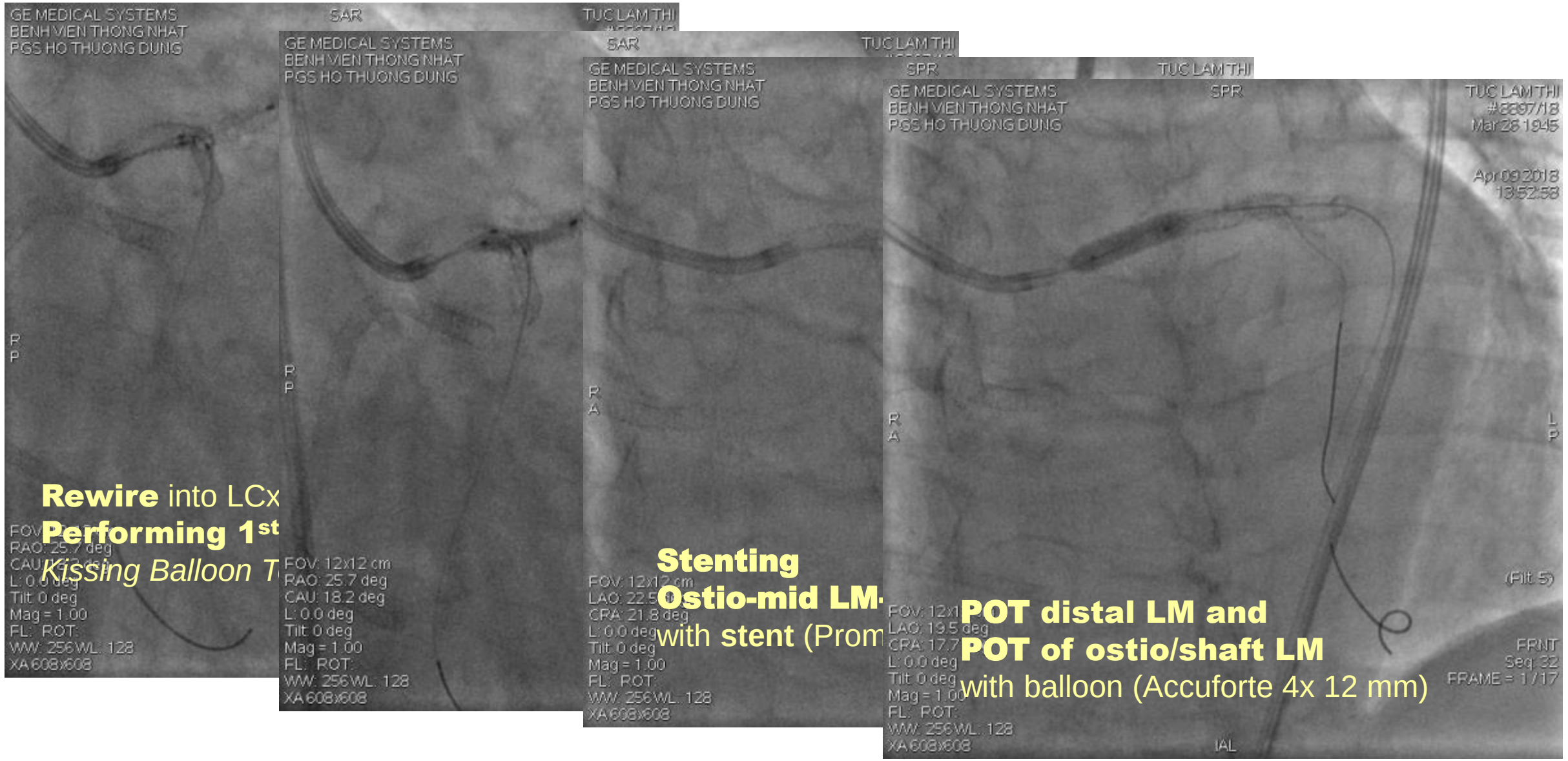
Predilating LM-I and LM-LCx os-I with balloons (Eup (Pantera LEO 2.5x 12

A/Prof Ho Thuong Dung-- Thong Nhat Hospital- HCMC- VN

CASE Nº 1: PCI to LCA *(Complex LM disease)*



CASE Nº 1: PCI to LCA *(Complex LM disease)*

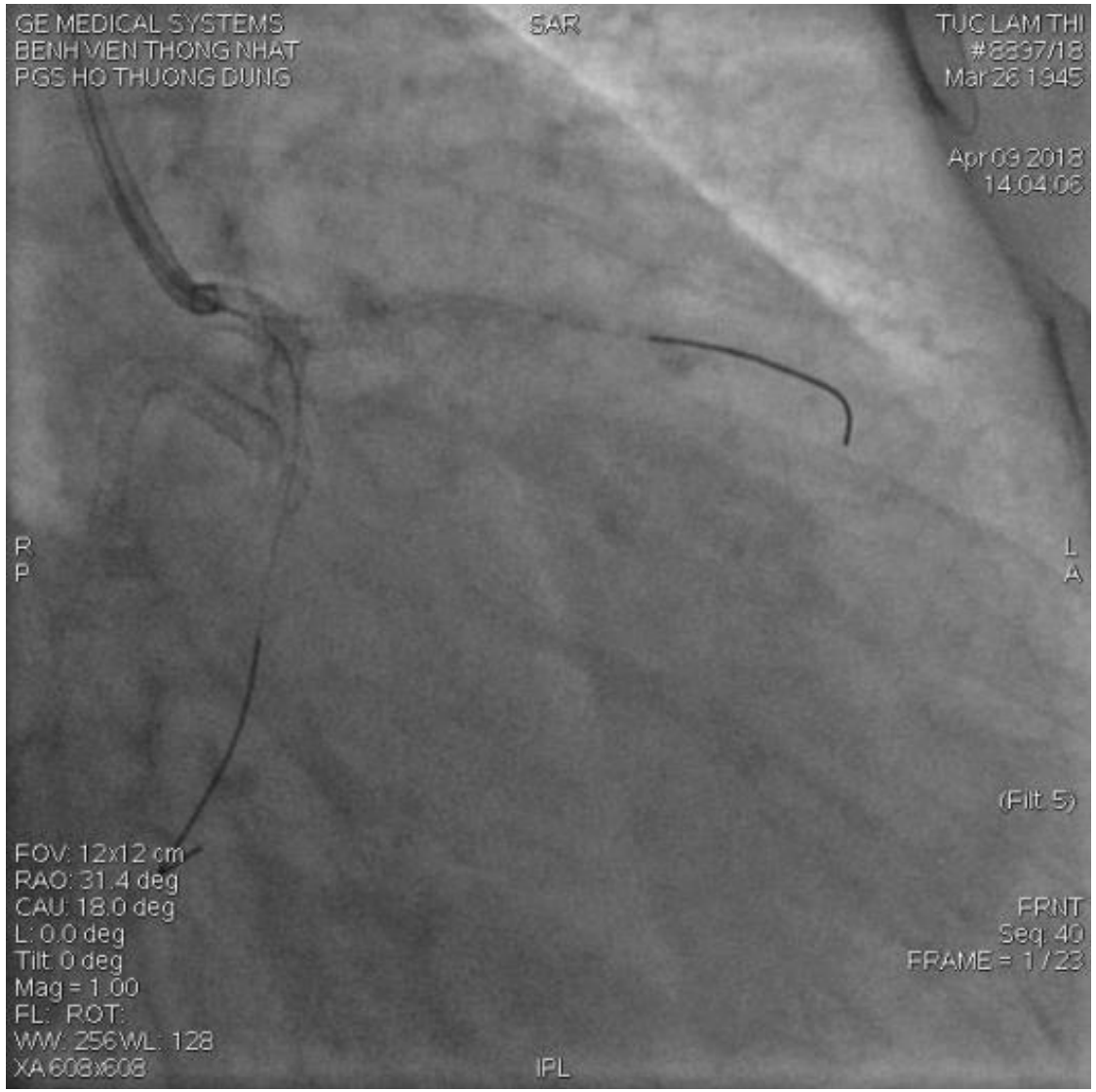


Rewire into LCx
Performing 1st
Kissing Balloon T

Stenting
Ostio-mid LM
with **stent** (Prom

POT distal LM and
POT of ostio/shaft LM
with balloon (Accuforte 4x 12 mm)

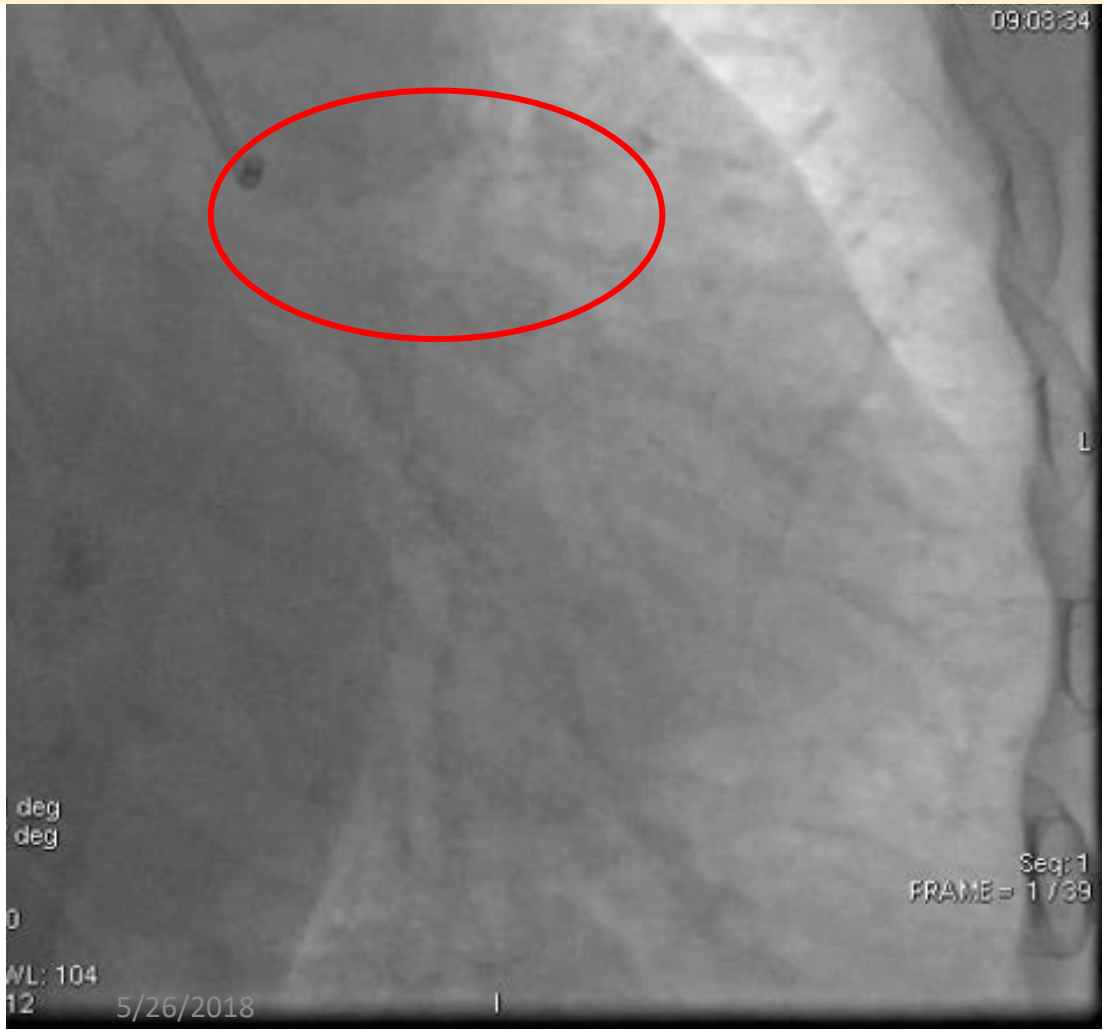
CASE Nº 1: PCI to LCA *(Complex LM disease)*



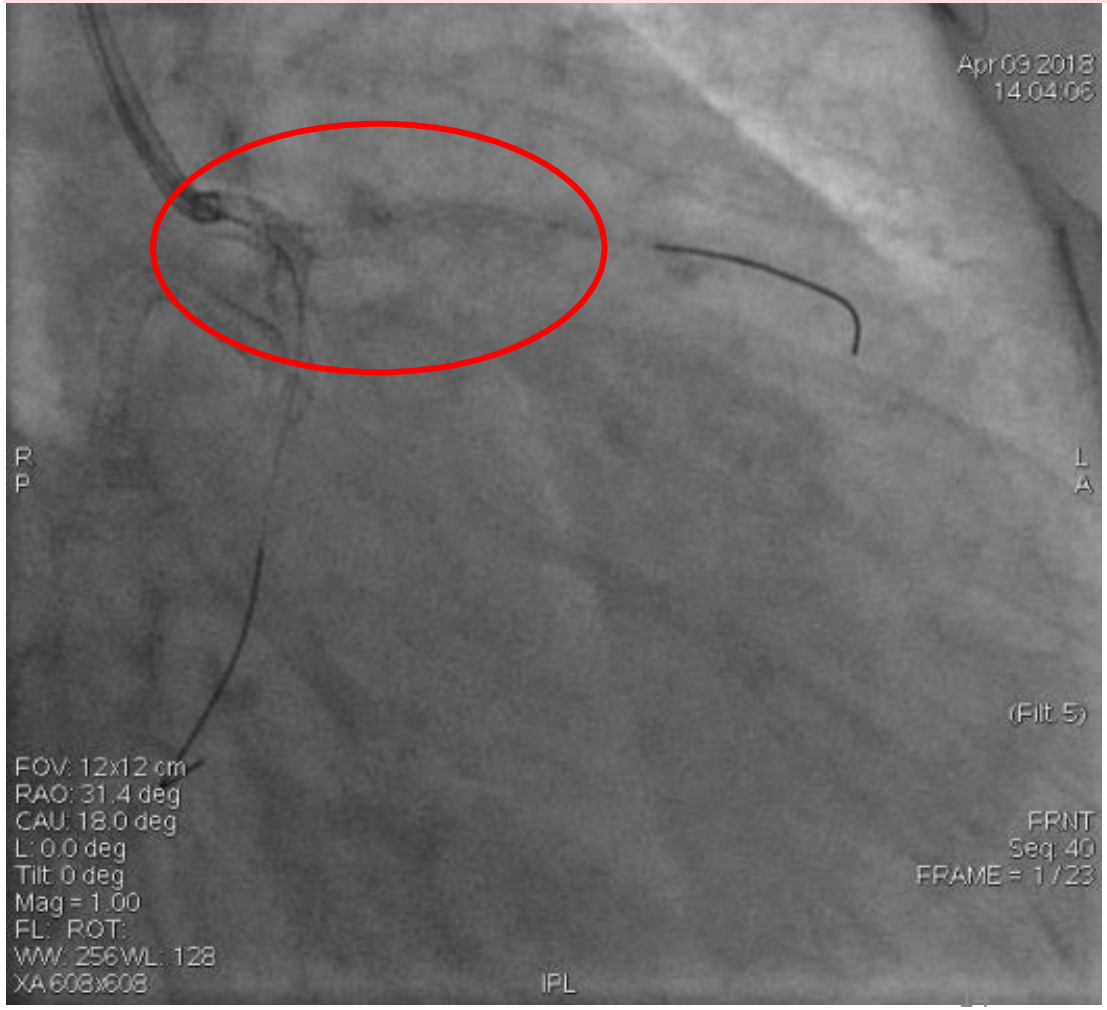
CASE Nº 1: NSTEMI

Result of PCI

PRE- PCI



POST- PCI

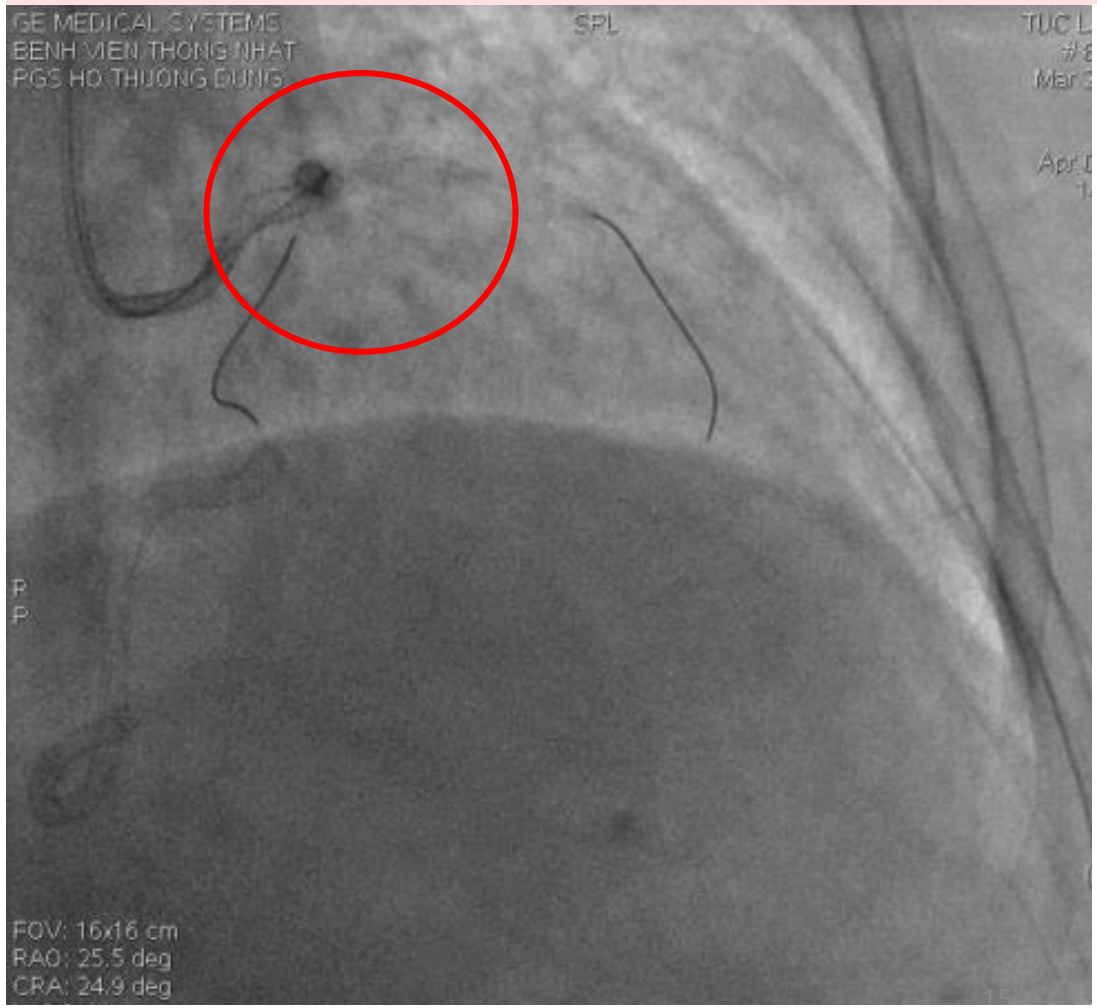


CASE Nº 1: NSTEMI

Result of PCI

PRE- PCI

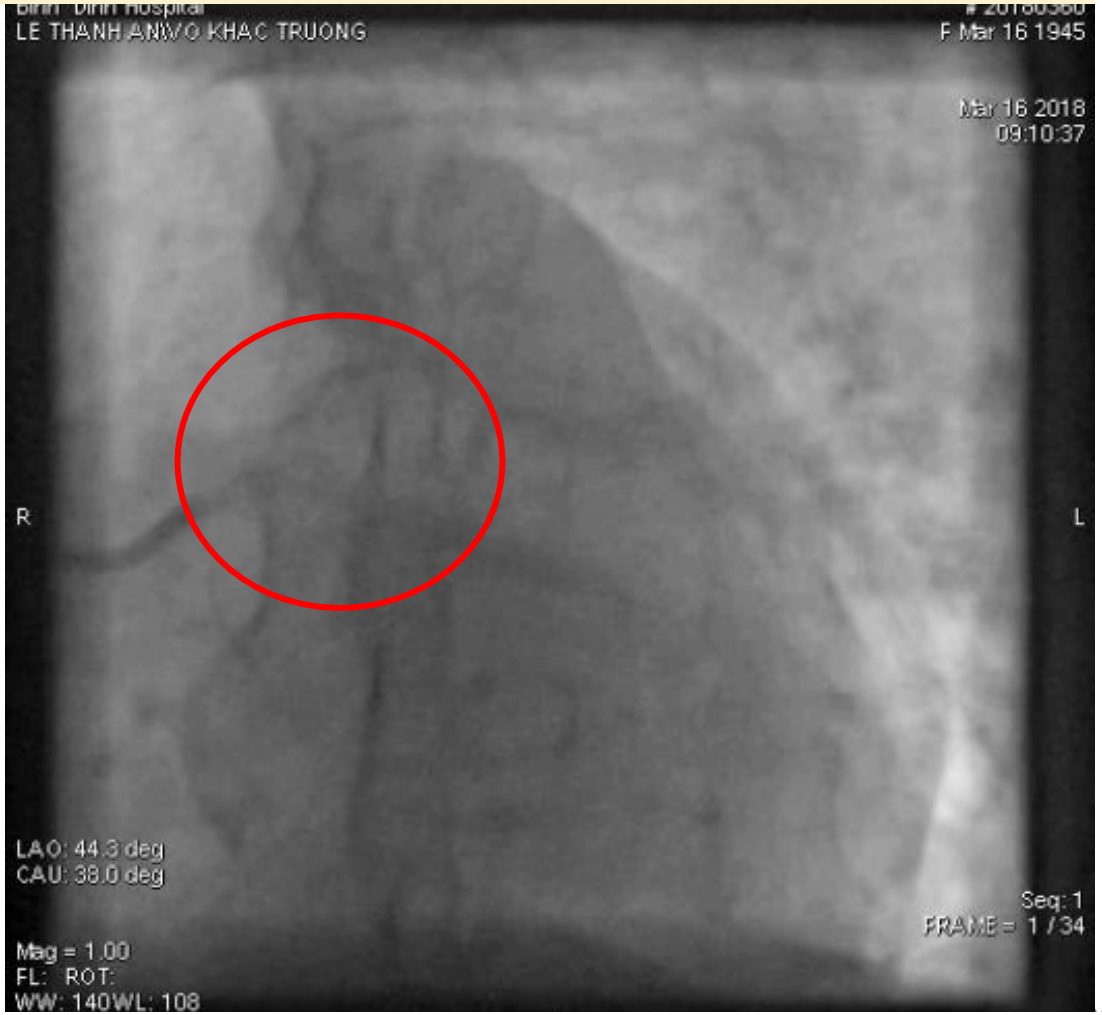
POST- PCI



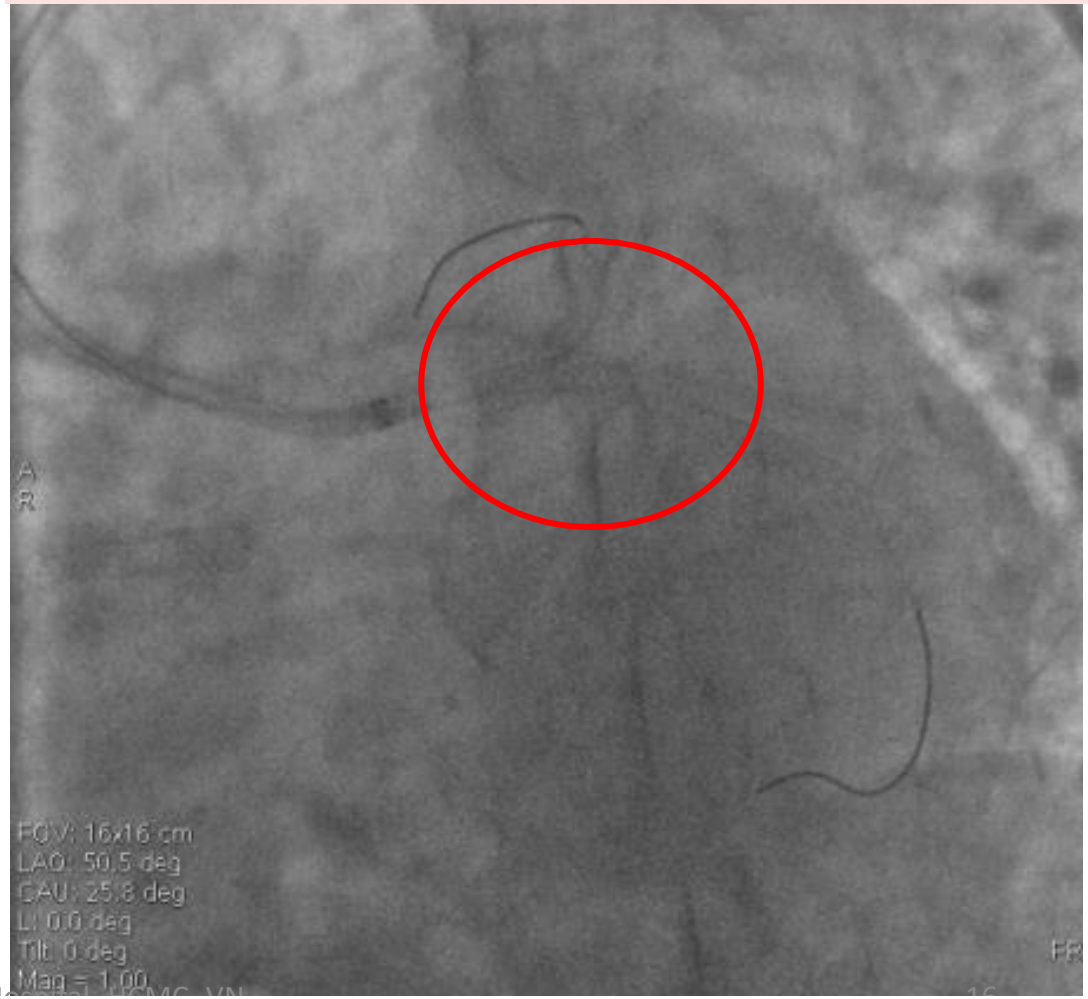
CASE Nº 1: NSTEMI

Result of PCI

PRE- PCI



POST- PCI



"MINIMIZED LM-PCI"

What is the "Minimized LM-PCI" ?

Minimized LM-PCI is strategy for incomplete PCI in case of very severe LM disease with very high procedural risk. We do *stenting to only LM with/without ostium of LAD/LCx*, provided *the benefit of intervention exceed those of inaction.*

CASE Nº 2: NSTEMI

NGUYEN NGOC M., 84 years-old male

- Was transferred from a local hospital at central high land of VN on 30th March, 2017.
- **CAG at provincial hospital:** *TVD with severe LM disease and severe calcified diffused lesions*

- ***Their interventionist*** tried to do PCI to RCA in rescuing the patient at high risk of NSTEMI. They did wiring and predilating with balloons successfully. However, they *failed to advance the stents (due to very calcified and tortuous)*
- They *stopped procedure and send the pt to our hospital emergently*

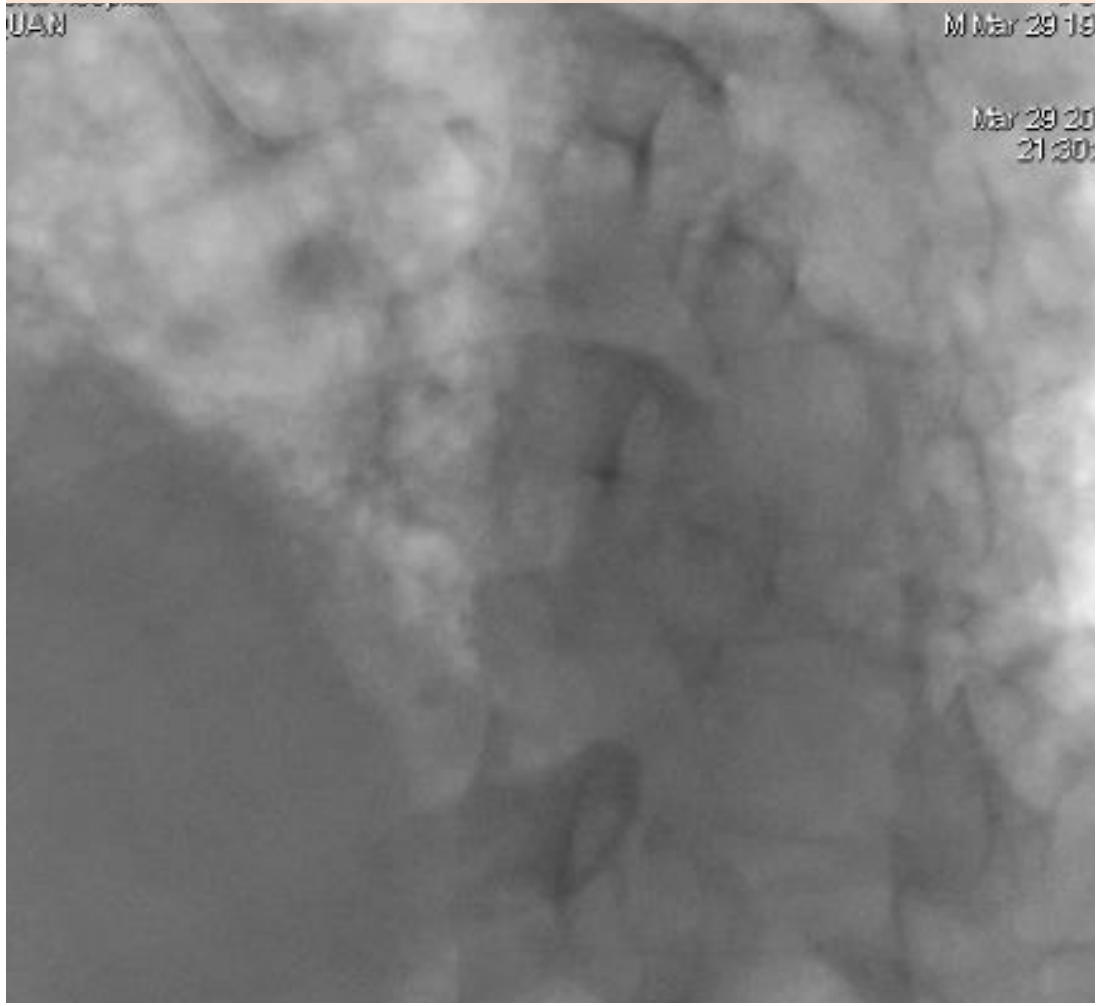
CASE Nº 2: NSTEMI

RCA-Angiogram

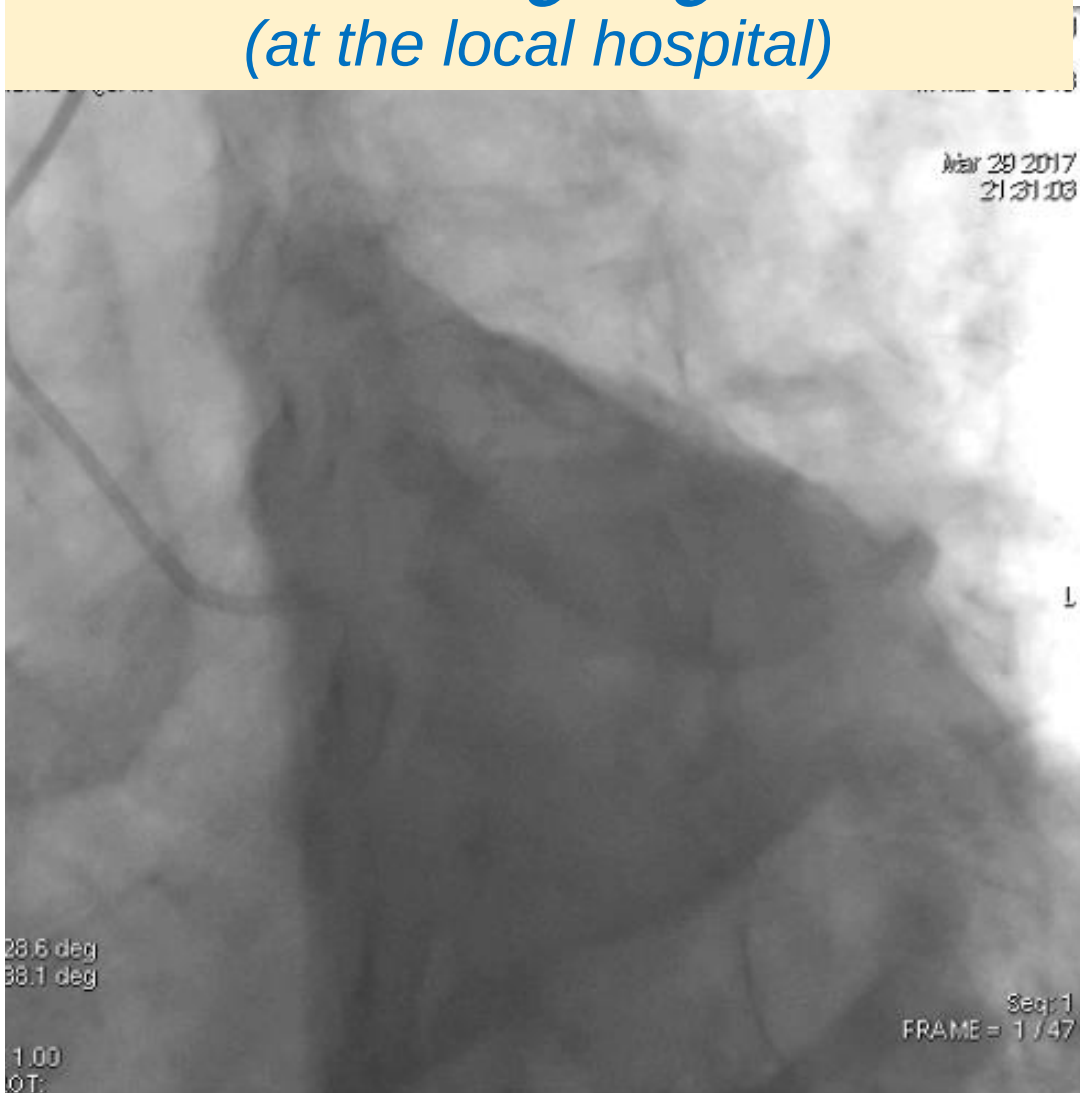
LCA-Angiogram

CASE Nº 2: NSTEMI

LCA- *Angiogram*
(at the local hospital)



LCA- *Angiogram*
(at the local hospital)



A/Prof Ho Thuong Dung-- Thong Nhat Hospital- HCMC- VN

After we do PCI to RCA well, he felt better but…

What should we do? What can we do?

A. *Continuing to persuade them bypass surgery.*

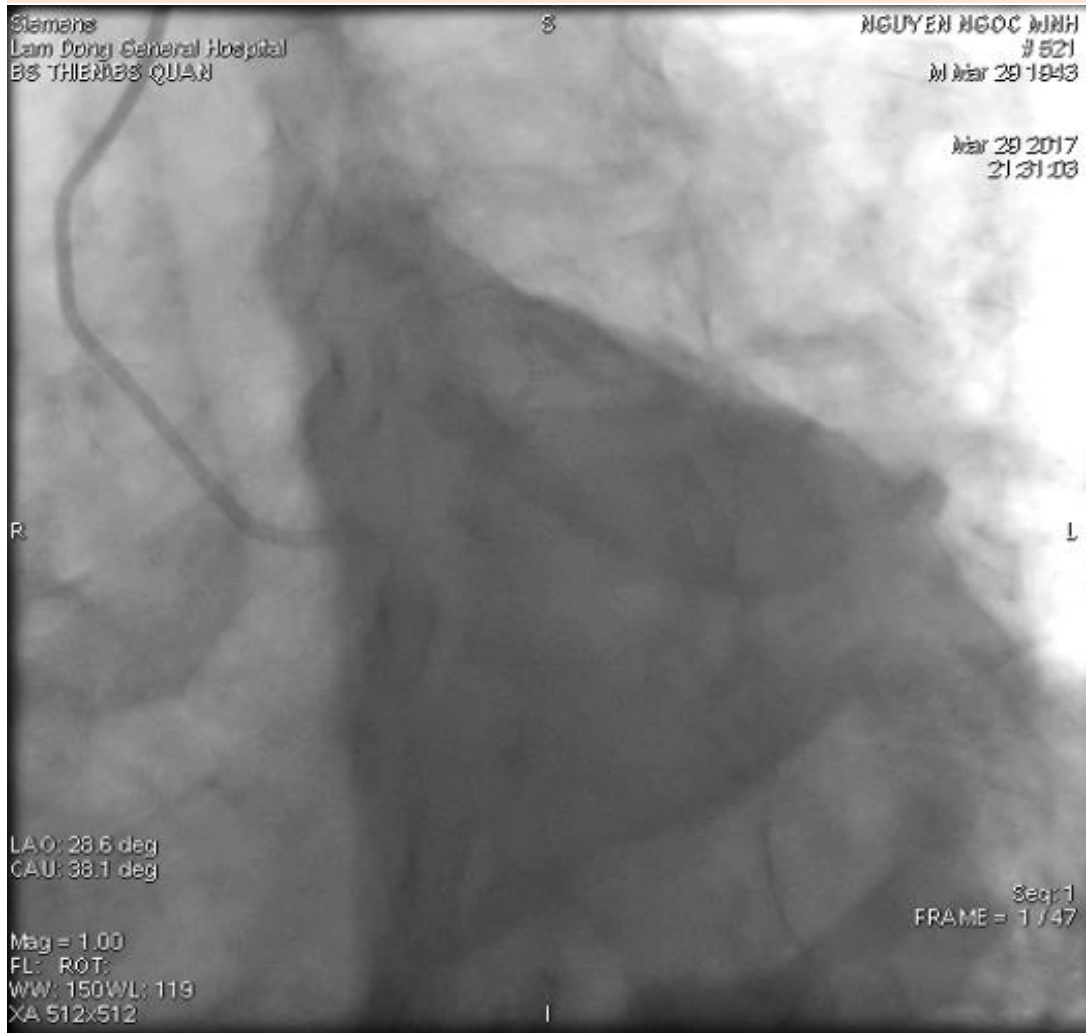
B. *Explaining and keeping medical therapy*

C. *Daring do some challenging difficult missions*

WHAT CAN WE DO?

CASE Nº 2: NSTEMI

LCA



Rationale for PCI to LM/LCA

PROBABLE BENEFIT: Left coronary artery system was very severe stenosis. There was *no significant collateral flow from RCA (even after stenting RCA well)*

VERY HIGH RISK: *There seems to be very calcified tight stenosis at both ostium and distal LM.The angles of bifurcation of distal LM were acute* or *right angles (LM-LAD and LM-LCx)*.

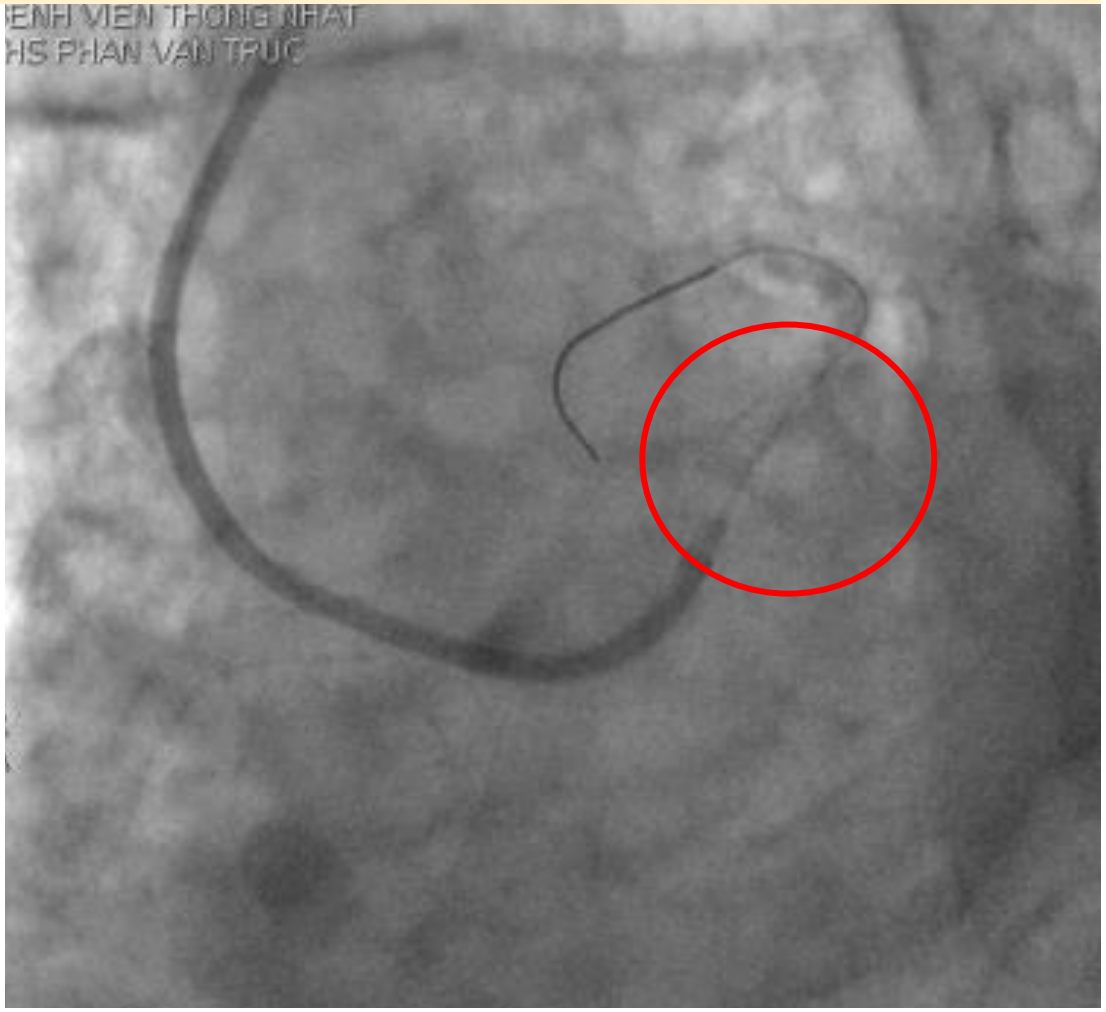
⇒ *They make anything (Balloon/Stent)* ***get stuck very easily*** *with terrible disasters*

Maybe, PCI to just "only LM" ?

CASE Nº 2: *Last result of PCI*

Pre- PCI

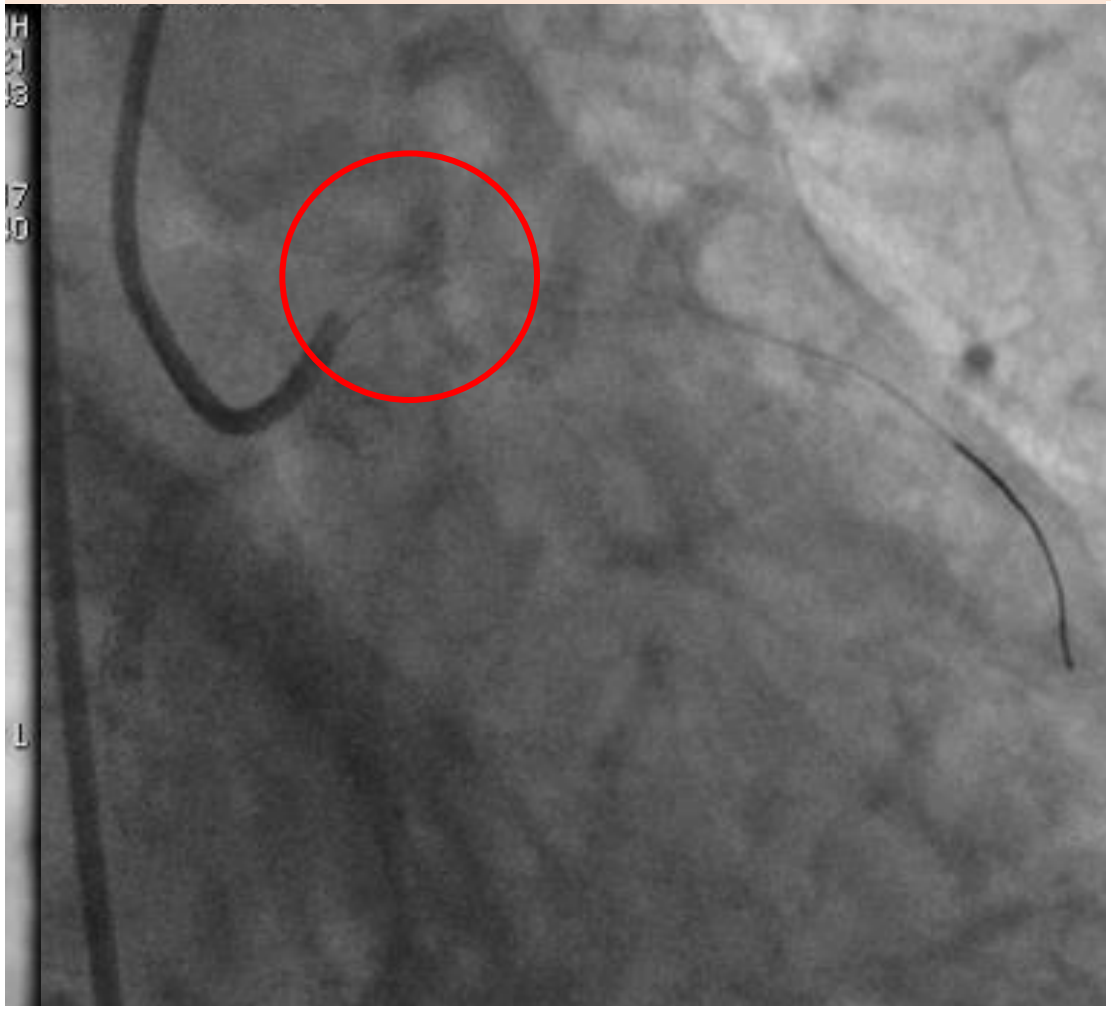
Post- PCI



CASE Nº 2: *Last Result of PCI*

Pre- PCI

Post- PCI



Finally, the patient felt well.
His family told that he can go upstair
(never done before)

We continue to follow up him...

CONCLUSIONS

- **CAD of the Elderly:** being often very severe: diffuse, dilated, tortuous, very calcified…,particularly type C, Bifurcation, LM, TVD, CTO…

  ⇒ *PCI in the Elderly* requires advanced techniques and assistant instruments

- ***Complete Revascularization in the Elderly*** sometime should be modified

  In case of very challenging LM disease, ***minimized*** **LM-PCI** may be reasonably acceptable choice in *older patients particularly at very high procedural risk*

- *DK-Crush seems to be a suitable 2-stent techniques* for the revascularization of very complicated LM revascularization at the Elderly

Thank you for your attention!